SQL Lab Select and Filter Data Exercises

Exercises

1. Select all columns from the movies table.

Write a query to retrieve all columns from the movies table.

```
SELECT *
FROM   movies;
```

2. Select only the title and release_year columns from the movies table.

Write a query to retrieve the title and release_year columns from the movies table.

```
SELECT title,
       release_year
FROM   movies;
```

3. Select all movies released after the year 2000.

Write a query to retrieve all movies that were released after the year 2000.

```
SELECT *
FROM   movies
WHERE  release_year > 2000;
```

4. Select all movies with the genre 'Action'.

Write a query to retrieve all movies that have the genre 'Action'.

```
SELECT *
FROM   movies
WHERE  genre = 'Action';
```

5. Count the total number of movies in the movies table.

Write a query to count the total number of movies in the movies table.

```
SELECT COUNT(*)
FROM movies;
```

6. Count the number of distinct genres in the movies table.

Write a query to count the number of distinct genres in the movies table.

```
SELECT COUNT(DISTINCT genre)
FROM   movies;
```

7. Select all movies released between 1990 and 2000.

Write a query to retrieve all movies that were released between 1990 and 2000.

```
SELECT *
FROM   movies
WHERE  release_year BETWEEN 1990 AND 2000;
```

8. Select all movies that are either in the 'Drama' genre or released before 1990.

Write a query to retrieve all movies that are either in the 'Drama' genre or were released before 1990.

```
SELECT *
FROM   movies
WHERE  genre = 'Drama'
        OR release_year < 1990;
```

9. Select all movies whose titles start with 'The'.

Write a query to retrieve all movies whose titles start with 'The'.

```
SELECT *
FROM   movies
WHERE  title LIKE 'The%'
```

10. Select all movies whose titles do not contain the word 'Love'.

Write a query to retrieve all movies whose titles do not contain the word 'Love'.

```
SELECT *
FROM   movies
WHERE  title NOT LIKE '%Love%'
```

11. Select all movies with genres in ('Drama', 'Fantasy', 'Action').

Write a query to retrieve all movies with genres in ('Drama', 'Fantasy', 'Action').

```
SELECT *
FROM   movies
WHERE  genre IN ( 'Drama', 'Fantasy', 'Action' );
```

12. Select the titles of all 'Fantasy' movies released between 2005 and 2015.

Write a query to retrieve the titles of all 'Fantasy' movies released between 2005 and 2015.

```
SELECT title
FROM   movies
WHERE  genre = 'Fantasy'
       AND release_year BETWEEN 2005 AND 2015;
```

13. Count the number of movies for each genre.

Write a query to count the number of movies for each genre.

```
SELECT genre,
       COUNT(*)
FROM   movies
GROUP  BY genre;
```

14. Select the first 10 movies released after the year 2000.

Write a query to retrieve the first 10 movies that were released after the year 2000.

```
SELECT *
FROM   movies
WHERE  release_year > 2000
LIMIT  10;
```

15. Select the movie titles that contain the word 'Star'.

Write a query to retrieve the titles of movies that contain the word 'Star'.

```
SELECT *
FROM   movies
WHERE  title LIKE '%Star%';
```

16. Select the distinct release years of movies.

Write a query to retrieve the distinct release years of movies.

```
SELECT DISTINCT release_year
FROM   movies;
```

17. Select the genres that have more than 50 movies.

Write a query to retrieve the genres that have more than 50 movies.

```
SELECT genre
FROM   movies
GROUP  BY genre
HAVING COUNT(genre) > 50;
```

18. Select all movies that are not in the 'Fantasy' genre.

Write a query to retrieve all movies that are not in the 'Fantasy' genre.

```
SELECT *
FROM   movies
WHERE  genre <> 'Fantasy';
```

19. Select all movies with a release year that is null.

Write a query to retrieve all movies with a release year that is null.

```
SELECT *
FROM   movies
WHERE  release_year IS NULL;
```

20. Select all movies released in the 1990s.

Write a query to retrieve all movies that were released in the 1990s.

```
SELECT *
FROM   movies
WHERE  release_year BETWEEN 1990 AND 1999;
```